REMARKS

I.   Introduction

Claims 1-23 are pending. In the Office Action mailed October 5, 2004, the Examiner rejected claims 1, 2, 5-8, 13 and 23 under 35 U.S.C. 103(a) as being unpatentable over Soliman (U.S. Patent No. 6,490,460) in view of Kamel (US 2002/0123362). The Examiner additionally rejected the remaining claims under 35 U.S.C. 103(a) as being unpatentable over Soliman in view of various combinations of Kamel, Dohi (US Patent No. 6,341,224), Cheng (U.S. Patent No. 6,154,638), Kamel 2 (U.S. Patent No. 6,496,531) and Hogan (U.S. Patent No. 6,442,393).

II.   Response to Rejection of Independent Claims 1, 7, 14, 16, 21 and 23

The Examiner rejected independent claim 1 as being unpatentable over the combination of Soliman and Kamel. Claim 1 is directed toward a method of controlling power used for communications between a mobile station and a base station, and it provides for "determining a location of the mobile station," and "based on the location, selecting an initial power level for communication between the mobile station and the base station." The initial power level is then used as the starting point for a power control process that regulates the power used for communications between the mobile station and the base station. Neither Soliman nor Kamel teaches or suggests all elements of this claim, including selecting an initial power level based on a location of a mobile station.

As described in Applicant's prior response, Soliman uses lookup tables to determine, based on the location of the mobile station, minimum and maximum permissible signal-to-noise ratios ("SNRs") on the reverse link (e.g., from the mobile station to the base station) and/or minimum and maximum transmit powers for the base station on the forward link (e.g., from the

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base station to the mobile station). A power control loop then adjusts the transmit power of the mobile station or the base station to fall within these ranges. In Soliman, the beginning power levels for the power control loop, however, do not vary depending on the location of the mobile station. Therefore, the beginning power level used by the mobile station in Soliman may be significantly far away from the final transmit power level after application of a power control loop, and therefore, Soliman may suffer from the same disadvantages described in Applicant's specification for stabilizing the transmit power of a mobile station.

The Examiner relied on Kamel as teaching an initial power level, and starting at the initial power level engaging in a power control process that regulates power used for communication between a mobile station and a base station. Kamel suffers from the same deficiency as Soliman – its initial power level is not based on the location of the mobile station. Kamel relates to "estimating the initial power level and transmission rate of a burst on a secondary channel." (Abstract). Specifically, Kamel teaches using the power level at the end of a previous burst as an indicator of the initial power level for a current burst. (¶0033, lines 1-4). Alternatively, the initial power level for a current burst can be determined using the power level of the primary channel and the power available at the power amplifier. (¶0035, lines 1-4). In neither operation is the initial power based on the location of the mobile station. Because Kamel explicitly teaches that selection of the initial power level is based on the power of a prior burst or the current power of a primary channel, any modification to select the initial power level based on a location of the mobile station would necessarily change the principle of operation of Kamel, which would be impermissible.

Because a prima facie case of obviousness does not exist, claim 1 is allowable. Independent claims 7, 14, 16, 21 and 23 include similar elements of selecting an initial transmit

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power based on a location of a mobile station and then using that initial transmit power as the starting point for a power control process. For the reasons discussed with respect to claim 1, these independent claims are also allowable. Therefore, claims 1-23 are all in condition for allowance.

III.   Response to Rejection of Claim 3

Claim 3 is additionally allowable, because none of the cited references teach or suggest sending to the mobile station an instruction to transmit at the selected initial power level, as recited in claim 3. Dohi uses control bits in a feedback mechanism to indicate whether to increase or decrease the transmission power of an object station. (Col. 4, lines 19-34). A current Signal-to Interference plus Noise power Ratio (SIR) is compared with a target SIR, and the control bits are then used to adjust the transmit power, thereby also adjusting the SIR. Thus, the control bits are not even used as part of setting an initial transmit power, they are only used once the object station has already started transmitting.

Moreover, the control bits do not even denote specific power levels. Rather, they are just flags to indicate whether to increase or decrease a current power level. In fact, the control bits cannot even specify the amount of the increase or decrease that should be performed, and they certainly cannot specify a particular power level. Therefore, they are not even capable of indicating an initial transmit power level. Therefore claim 3 is additionally allowable, because Dohi does not teach or suggest sending an instruction to a mobile station to transmit at the selected initial power level.

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IV. Conclusion

Applicant respectfully submits that claims 1-23 are all in condition for allowance. Should the Examiner have any questions, the Examiner is encouraged to contact Applicant's attorney, Brian Harris, at his direct dial number of 312-913-3303.

Respectfully submitted,

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Brian R. Harris
Reg. No. 45,900
Attorney for Applicant

McDonnell Boehnen Hulbert & Berghoff LLP
300 South Wacker Dr., 31st Floor
Chicago, IL 60606
Tel: 312-913-0001
Fax: 312-913-0002

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